SEQUENCE LISTING

<110> Biom asure, Inc.

<120> ANALOGUES OF GLP-1

<130> 00537/186WO1

<150> 09/206,601
<151> 1998-12-07

<160> 363

<170> PatentIn Ver. 2.0

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1 5 10 15
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20 25 30

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Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
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<220>
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<400> 40
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 41
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<210>
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<222> (2)
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<210>
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<210>
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<210>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this s quence has an amidated c-terminus

<400> 41
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Xaa Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 42
<211> 30
<212> PRT
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<220>
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<210>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<210>
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<210>
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<220>
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<400> 42
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Xaa Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 43
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<400> 43
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Lys Glu Phe Xaa Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 44
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 44
His Xaa Glu Gly Thr Xaa Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 45
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> cyclohexylalanine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
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His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 46
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 46
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Xaa Lys Xaa Arg
20 25 30

<210> 47
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 47
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 48
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 48
His Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 49
<211> 30

<212> PRT
<213> Artificial Sequence

<220>
<223> Mutag n

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<223> alpha-aminoisobutyric acid

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<223> beta-alanine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 49
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Xaa
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 50
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<223> this sequence has an amidated c-terminus

<400> 50
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Xaa
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 51
<211> 30
<212> PRT
<213> Artificial Sequ nce

<220>
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<220>
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<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 51
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 52
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<400> 52
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 53
<211> 30

<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
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<400> 53
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Xaa Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 54
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
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<223> 1-amino-1-cyclohexanecarboxylic acid

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<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 54
His Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Glu Xaa Xaa Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 55
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 55
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 56
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<220>
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 56
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 57
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 57
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 58
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidat d c-terminus

<400> 58
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 59
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 59
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Xaa Trp Leu Val Lys Xaa Arg
20 25 30

<210> 60
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (29)
<223> beta-alanine

<220>
<223> this s quenc has an amidated c-terminus

<400> 60
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Xaa Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 61
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<220>
<221> MOD_RES
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
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<400> 61
His Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 62
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> 1-amino-1-cyclohexan carboxylic acid

<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 62
His Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Xaa Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 63
<211> 30
<212> PRT
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<220>
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<220>
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<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 63
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 64
<211> 30
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<213> Artificial Sequ nc

<220>
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<220>
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<220>
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<400> 64
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 65
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (29)
<223> beta-alanine

<220>
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<400> 65
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 66
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 66
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Xaa Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 67
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 67
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Xaa Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 68
<211> 30
<212> PRT
<213> Artificial S qu nce

<220>
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<220>
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<220>
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<220>
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<220>
<221> MOD_RES
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 68
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Lys Glu Phe Xaa Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 69
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 69
His Xaa Glu Gly Thr Xaa Thr S r Asp Val S r Ser Tyr L u Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Ph Ile Ala Trp Leu Val Lys Xaa Arg
            20   25   30

<210> 70
<211> 30
<212> PRT
<213> Artificial Sequ nce

<220>
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<220>
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<220>
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<222> (14)
<223> cyclohexylalanine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 70
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
  1   5   10   15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
            20   25   30

<210> 71
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 71
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
  1   5   10   15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Xaa Lys Xaa Arg
            20   25   30

<210> 72
<211> 30
<212> PRT
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<220>
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<220>
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<222> (2)
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<220>
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<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 72
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 73
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<223> beta-alanine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 73
His Xaa Glu Gly Thr Phe Thr Ser Asp Val S r Ser Tyr L u Glu Xaa
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 74
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (16)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 74
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Xaa
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 75
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 75
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Ph Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 76
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutag n

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 76
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 77
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES

<222> (29)
<223> b ta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 77
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 78
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 78
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Xaa Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 79
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

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<223> alpha-aminoisobutyric acid

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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26))
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 79
His Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Ser Tyr Xaa Glu Gly
1 5 10 15
Glu Xaa Xaa Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Arg
20 25 30

<210> 80
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 80
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp L u Val Arg Xaa Arg
20 25 30

<210> 81
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<221> MOD_RES
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 81
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 82
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 82
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 83
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this s qu nce has an amidated c-terminus

<400> 83
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 84
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (29)
<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<400> 84
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 85
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N- psilon-tetradecanoyl-lysin

<400> 85
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa Gly
20 25 30

<210> 86
<211> 31
<212> PRT
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<220>
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<222> (2)
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
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<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (31)
<223> alpha-aminoisobutyric acid

<400> 86
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa Xaa
20 25 30

<210> 87
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (31)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-tetradecanoyl-lysin

<400> 87
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 1   5   10   15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
            20   25   30

<210> 88
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<222> (29)
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<220>
<221> MOD_RES
<222> (31)
<223> beta-alanine

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-tetradecanoyl-lysine

<400> 88
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 1   5   10   15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
            20   25   30

<210> 89
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-tetradecanoyl-lysine

<400> 89
His Xaa Glu Gly Thr Phe Thr S r Asp Val Ser Ser Tyr L u Glu Gly
 1   5   10   15

Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 90
<211> 31
<212> PRT
<213> Artificial Sequence

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<220>
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<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (31)
<223> beta-alanine

<400> 90
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Gly Xaa Xaa
20 25 30

<210> 91
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
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<222> (31)
<223> alpha-aminoisobutyric acid

<400> 91
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Gly Xaa Xaa
20 25 30

<210> 92
<211> 31
<212> PRT
<213> Artificial S qu nce

<220>
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<220>
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<220>
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<222> (29)
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<220>
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<222> (31)
<223> 12-aminododecanoic acid

<400> 92
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa
20 25 30

<210> 93
<211> 31
<212> PRT
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (31)
<223> 12-aminododecanoic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 93
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa
20 25 30

<210> 94
<211> 32
<212> PRT
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<220>
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<400> 94
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Gly Arg Xaa Xaa
20 25 30

<210> 95
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (31)
<223> beta-alanine

<220>
<221> MOD_RES
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<223> N-epsilon-tetradecanoyl-lysine

<400> 95
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Gly Arg Xaa Xaa
20 25 30

<210> 96
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (20)
<223> N- psilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 96
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Gly Arg Xaa Xaa
20 25 30

<210> 97
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 97
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 98
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<220>
<221> MOD_RES
<222> (20)
<223> N-epsilon-hexadecanoyl-lysine

<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 98
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser S r Tyr L u Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 99
<211> 30
<212> PRT
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<220>
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<220>
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<223> N-epsilon-octanoyl-lysine

<220>
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 99
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 100
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<212> PRT
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<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

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<222> (29)
<223> b ta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 100
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 101
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<220>
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<223> N-epsilon-hexaxecanoyl-lysine

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<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 101
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 102
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<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<223> this sequ nc has an amidated c-terminus

<400> 102
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 103
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (20)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 103
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 104
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<220>
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<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 104
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 105
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-decanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 105
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 106
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 106
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 107
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<222> (20)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 107
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 108
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (20)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 108
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 109
<211> 30

<212> PRT
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<220>
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<220>
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<222> (20)
<223> N-epsilon-octanoyl-lysine

<220>
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 109
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 110
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 110
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 111
<211> 30
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (20)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 111
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 112
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<212> PRT
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<220>
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<220>
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<223> N-epsilon-decanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 112
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 113
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> N-epsilon-octanoyl-lysine

<220>
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 113
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 114
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<212> PRT
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<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 114
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 115
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<212> PRT
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<220>
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<222> (2)
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 115
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 116
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-decanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 116
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 117
<211> 30
<212> PRT
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 117
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 118
<211> 30
<212> PRT
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<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 118
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 119
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<222> (28)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 119
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 120
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 120
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 121
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 121
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 122
<211> 30
<212> PRT
<213> Artificial Sequence

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<223> alpha-aminoisobutyric acid

<220>
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<223> N-epsilon-decanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 122
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 123
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES

<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 123
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 124
<211> 30
<212> PRT
<213> Artificial Sequence

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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 124
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 125
<211> 30
<212> PRT
<213> Artificial Sequence

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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 125
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 126
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (28)
<223> N-epsilon-decanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 126
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 127
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 127
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr L u Glu Gly
  1   5   10   15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
            20   25   30

<210> 128
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 128
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
  1   5   10   15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
            20   25   30

<210> 129
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 129
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr L u Glu Gly
  1   5   10   15

Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 130
<211> 30
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<220>
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<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 130
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 131
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 131
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Ph Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 132
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 132
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 133
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 133
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 134
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<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 134
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 135
<211> 30
<212> PRT
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 135
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 136
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<220>
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<220>
<223> this sequence has an amidated c-terminus

<400> 136
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 137
<211> 30
<212> PRT
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 137
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 138
<211> 32
<212> PRT
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 138
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 139
<211> 32
<212> PRT
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-decanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 139
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 140
<211> 32
<212> PRT
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<220>
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<222> (2)
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 140
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 141
<211> 32
<212> PRT
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 141
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 142
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 142
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 143
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-decanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 143
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 144
<211> 32
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 144
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 145
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 145
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 146
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 146
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 147
<211> 32
<212> PRT
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<220>
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<220>
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<223> N- psilon-d canoyl-lysin

<220>
<223> this sequence has an amidated c-terminus

<400> 147
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 148
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 148
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 149
<211> 32
<212> PRT
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<220>
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<221> MOD_RES
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<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 149
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 150
<211> 32
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<223> N-epsilon-decanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 150
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 151
<211> 32
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 151
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 152
<211> 32
<212> PRT
<213> Artificial Sequence

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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 152
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 153
<211> 30
<212> PRT
<213> Artificial S quence

<220>
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<220>
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<222> (29)
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 153
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 154
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 154
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 155
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 155
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 156
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 156
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 157
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 157
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 158
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 158
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 159
<211> 30
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-decanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 159
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 160
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 160
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 161
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (28)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 161
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 162
<211> 30
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 162
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 163
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 163
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 164
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 164
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 165
<211> 30
<212> PRT
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<220>
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<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 165
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 166
<211> 30
<212> PRT
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 166
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 167
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 167
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 168
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<212> PRT
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

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<220>
<223> this sequence has an amidated c-terminus

<400> 168
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

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<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 169
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 170
<211> 30
<212> PRT
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<220>
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<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 170
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 171
<211> 30
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<220>
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<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 171
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 172
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 172
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 173
<211> 30
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<220>
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<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 173
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 174
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 174
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 175
<211> 30
<212> PRT
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<220>
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<220>
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<220>
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<220>
<221> MOD_RES
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<223> beta-alanin

<220>
<223> this sequence has an amidated c-terminus

<400> 175
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 176
<211> 30
<212> PRT
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 176
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 177
<211> 30
<212> PRT
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 177
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 178
<211> 30
<212> PRT
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<220>
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<220>
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<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 178
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 179
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

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<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 179
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 180
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<220>
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<220>
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<220>
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<222> (29)
<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 180
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 181
<211> 30
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<220>
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<220>
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<220>
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<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 181
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 182
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 182
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 183
<211> 30
<212> PRT
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<220>
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<223> beta-alanine

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<221> MOD_RES
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<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 183
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 184
<211> 30

<212> PRT
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<220>
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<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 184
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 185
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> beta-alanine

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 185
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 186
<211> 30
<212> PRT
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<221> MOD_RES
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<223> N-epsilon-decanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 186
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 187
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 187
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 188
<211> 30
<212> PRT
<213> Artificial S quence

<220>
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 188
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 189
<211> 30
<212> PRT
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<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 189
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Lys Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 190
<211> 30
<212> PRT
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<220>
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<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 190
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 191
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 191
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 192
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 192
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 193
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> beta-alanine

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<221> MOD_RES
<222> (30)
<223> N-epsilon-decanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 193
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 194
<211> 30
<212> PRT
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 194
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Xaa Val Arg Xaa Arg
20 25 30

<210> 195
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (20)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cylohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 195
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Xaa Val Arg Xaa Arg
20 25 30

<210> 196
<211> 30
<212> PRT
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<223> alpha-aminoisobutyric acid

<220>
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<222> (20)
<223> N-epsilon-hexadecanoyl-lysine

<220>
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<222> (26)
<223> 1-amino-1-cylohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 196
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Xaa Val Arg Xaa Arg
20 25 30

<210> 197
<211> 30
<212> PRT
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<223> 1-amino-1-cylohexanecarboxylic acid

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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 197
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 198
<211> 30
<212> PRT
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<223> 1-amino-1-cylohexanecarboxylic acid

<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 198
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 199
<211> 30
<212> PRT
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
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<400> 199
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 200
<211> 30
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<213> Artificial Sequence

<220>
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<220>
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<223> 1-amino-1-cylohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 200
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 201
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> 1-amino-1-cylohexanecarboxylic acid

<220>
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<223> N-epsilon-tetrad canoyl-lysine

<220>
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<220>
<223> this sequence has an amidated c-terminus

<400> 201
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 202
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 202
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 203
<211> 30
<212> PRT
<213> Artificial Sequence

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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 203
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 204
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 204
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 205
<211> 30
<212> PRT
<213> Artificial Sequenc

<220>
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<220>
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<222> (30)
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<220>
<223> this sequence has an amidated c-terminus

<400> 205
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 206
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 206
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Ph Il Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 207
<211> 30
<212> PRT
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 207
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 208
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

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<223> 1-amino-1-cylohexanecarboxylic acid

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<221> MOD_RES
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<223> N- psilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-t rminus

<400> 208
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 209
<211> 30
<212> PRT
<213> Artificial Sequence

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<221> MOD_RES
<222> (30)
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<220>
<223> this sequence has an amidated c-terminus

<400> 209
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 210
<211> 30
<212> PRT
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<220>
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<223> alpha-aminoisobutyric acid

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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 210
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 211
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 211
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 212
<211> 30
<212> PRT
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<220>
<223> this sequence has an amidated c-terminus

<400> 212
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 213
<211> 30
<212> PRT
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<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 213
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 214
<211> 30
<212> PRT
<213> Artificial Sequ nce

<220>
<223> Mutag n

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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 214
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 215
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 215
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 216
<211> 30
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<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 216
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 217
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<220>
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<220>
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<220>
<223> this s qu nc has an amidated c-terminus

<400> 217
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 218
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 218
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 219
<211> 30
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 219
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 220
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<220>
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 220
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Xaa Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 221
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<220>
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<222> (18)
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 221
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 222
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 222
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 223
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<220>
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<220>
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<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 223
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 224
<211> 30
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<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 224
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 225
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<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 225
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 226
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<212> PRT
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<220>
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<220>
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<223> 1-amino-1-cylohexanecarboxylic acid

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<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 226
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Xaa Xaa Arg
20 25 30

<210> 227
<211> 30
<212> PRT
<213> Artificial S quence

<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-octanoyl-lysine

<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 227
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 228
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<212> PRT
<213> Artificial Sequence

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<223> N-epsilon-tetradecanoyl-lysine

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 228
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 229
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 229
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 230
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 230
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 231
<211> 30
<212> PRT
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<220>
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<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 231
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 232
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 232
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Xaa
20 25 30

<210> 233
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<220>
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<220>
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<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 233
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 234
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<212> PRT
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<220>
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<220>
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<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 234
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 235
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 235
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 236
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> N-epsilon-octanoyl-lysine

<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 236
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Arg Xaa Arg
20 25 30

<210> 237
<211> 30
<212> PRT
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<220>
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<220>
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<220>
<223> this sequence has an amidated c-terminus

<400> 237
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Arg Xaa Arg
20 25 30

<210> 238
<211> 30
<212> PRT
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 238
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Arg Xaa Arg
20 25 30

<210> 239
<211> 30
<212> PRT
<213> Artificial S quence

<220>
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<220>
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<220>
<223> this sequence has an amidated c-terminus

<400> 239
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 240
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<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> this sequence has an amidated c-terminus

<400> 240
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Il Xaa Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 241
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 241
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 242
<211> 30
<212> PRT
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<220>
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<223> alpha-aminoisobutyric acid

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<220>
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<222> (30)
<223> N-epsilon-octanoyl-lysin

<220>
<223> this s qu nce has an amidated c-terminus

<400> 242
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Ph Ile Xaa Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 243
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

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<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 243
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Xaa Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 244
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
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<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 244
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Xaa Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 245
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<212> PRT
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<220>
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 245
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 246
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 246
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 247
<211> 30
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<213> Artificial Sequence

<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 247
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Lys Glu Phe Ile Ala Trp Xaa Val Lys Xaa Xaa
20 25 30

<210> 248
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 248
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 249
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 249
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Ph Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 250
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 250
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Ala Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 251
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES

<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 251
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 252
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 252
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 253
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 253
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Arg Glu Phe Ile Ala Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 254
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanoyl-lysine

<220>
<223> this s quence has an amidated c-terminus

<400> 254
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Arg Glu Phe Ile Xaa Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 255
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-tetradecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 255
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Arg Glu Phe Ile Xaa Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 256
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES

<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)
<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (26)
<223> 1-amino-1-cyclohexanecarboxylic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanoyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 256
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Glu Xaa Ala Arg Glu Phe Ile Xaa Trp Xaa Val Arg Xaa Xaa
20 25 30

<210> 257
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-(4-(2-hydroxyethyl)-1-piperazine-ethanesulfonyl)-
histidine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 257
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Ph Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 258
<211> 30

<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-(4-(2-hydroxyethyl)-1-piperazine-ethanesulfonyl)-histidine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 258
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 259
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-(4-(2-hydroxyethyl)-1-piperazine-ethanesulfonyl)-histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 259
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 260
<211> 30
<212> PRT
<213> Artificial Sequenc

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-(4-(2-hydroxyethyl)-1-piperazin acetyl)-
histidine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 260
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 261
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-(4-(2-hydroxyethyl)-1-piperazineacetyl)-
histidine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 261
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 262
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-(4-(2-hydroxyethyl)-1-piperazineacetyl)-
histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 262
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 263
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 263
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 264
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 264
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Ph Ile Ala Trp L u Val Lys Xaa Arg
20 25 30

<210> 265
<211> 30
<212> PRT
<213> Artificial Sequenc

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 265
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 266
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 266
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg
20 25 30

<210> 267
<211> 30

<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 267
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 268
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 268
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 269
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES

<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 269
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 270
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this sequence has an amidated c-terminus

<400> 270
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 271
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (29)
<223> b ta-alanin

<220>
<223> this s quence has an amidated c-terminus

<400> 271
Xaa Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 272
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 272
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 273
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (1)
<223> N-alpha-tetradecanoyl-histidine

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> beta-alanine

<220>
<223> this s quenc has an amidat d c-terminus

<400> 273
Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 274
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (20)
<223> N-epsilon-octanesulfonyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 274
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 275
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (20)
<223> N-epsilon-dodecanesulfonyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequ nce has an amidated c-terminus

<400> 275
His Xaa Glu Gly Thr Phe Thr Ser Asp Val S r Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 276
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (20)
<223> N-epsilon-hexadecanesulfonyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 276
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 277
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-octanesulfonyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 277
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser S r Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Il Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 278
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-dodecanesulfonyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 278
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 279
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-hexadecanesulfonyl-lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 279
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 280
<211> 30

<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-octanesulfonyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 280
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 281
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> N-epsilon-hexadecanesulfonyl-lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 281
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 282
<211> 30
<212> PRT
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<220>
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<220>
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 282
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 283
<211> 30
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<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 283
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 284
<211> 30
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<213> Artificial S quence

<220>
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<220>
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<223> (1-(4-tetradecylpiperazine))aspartic acid

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<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 284
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 285
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 285
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 286
<211> 30
<212> PRT
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<220>
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<223> (1-(4-decylpiperazine))aspartic acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<400> 286
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 287
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<212> PRT
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<223> alpha-aminoisobutyric acid

<220>
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<400> 287
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 288
<211> 30
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<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 288
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 289
<211> 30
<212> PRT
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<220>
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<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 289
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 290
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<212> PRT
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<221> MOD_RES
<222> (30)
<223> (1-(4-decylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 290
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 291
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<221> MOD_RES
<222> (30)
<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 291
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 292
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (30)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 292
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 293
<211> 32
<212> PRT
<213> Artificial Sequence

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<223> (1-(4-decylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 293
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 294
<211> 32
<212> PRT
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<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<223> this s quence has an amidated c-terminus

<400> 294
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 295
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (32)
<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 295
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 296
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 296
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 1   5   10   15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
            20   25   30

<210> 297
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
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<223> (1-(4-decylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 297
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 1   5   10   15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
            20   25   30

<210> 298
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
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<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 298
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 299
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (32)
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<220>
<223> this sequence has an amidated c-terminus

<400> 299
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 300
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (32)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 300
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 301
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> (1-(4-decylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 301
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 302
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 302
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 303
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 303
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 304
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (20)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 304
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 305
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (1-(4-decylpiperazine))aspartic acid

<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 305
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 306
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 306
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 307
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 307
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 308
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 308
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 309
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (30)
<223> (1-(4-decylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 309
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 310
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (30)
<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 310
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 311
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 311
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 312
<211> 30
<212> PRT
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 312
His Xaa Glu Gly Thr Phe Thr Ser Asp Val S r Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 313
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> (1-(4-decylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 313
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 314
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
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<222> (32)
<223> (1-(4-dodecylpiperazine))aspartic acid

<220>
<223> this s quence has an amidat d c-terminus

<400> 314
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser S r Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 315
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 315
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 316
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<223> this s quence has an amidat d c-t rminus

<400> 316
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 317
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<220>
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<220>
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<222> (32)
<223> (1-(4-decylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 317
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 318
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (1-(4-dod cylpiperazine))aspartic acid

<220>
<223> this s quence has an amidated c-terminus

<400> 318
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 319
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (32)
<223> (1-(4-tetradecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 319
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 320
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<222> (31)
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<220>
<221> MOD_RES
<222> (32)
<223> (1-(4-hexadecylpiperazine))aspartic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 320
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 321
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (30)
<223> (1-dodecylamino))glutamic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 321
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 322
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> (1-dod cylamino))glutamic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 322
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 323
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
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<220>
<221> MOD_RES
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<223> (1-dodecylamino))glutamic acid

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 323
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 324
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
<222> (32)
<223> (1-dodecylamino))glutamic acid

<220>
<223> this sequence has an amidated c-terminus

<400> 324
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 325
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 325
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 326
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> N- psilon-(2-(4-dod cyl-1-piperazine)-ac tyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 326
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 327
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<222> (20)
<223> N-epsilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 327
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 328
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N- psilon-(2-4-hexad cyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES

<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 328
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 329
<211> 30
<212> PRT
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<220>
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<220>
<221> MOD_RES
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<220>
<223> this sequence has an amidated c-terminus

<400> 329
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 330
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 330
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 331
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
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<222> (29)
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<220>
<223> this sequence has an amidated c-terminus

<400> 331
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 332
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> N-epsilon-(2-(4-hexadecyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
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<223> alpha-aminoisobutyric acid

<220>
<223> this sequ nce has an amidated c-t rminus

<400> 332
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 333
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 333
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 334
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (30)
<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequ nce has an amidated c-terminus

<400> 334
His Xaa Glu Gly Thr Ph Thr S r Asp Val Ser Ser Tyr L u Glu Gly
1 5 10 15

Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 335
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<222> (30)
<223> N-epsilon-(2-(4-hexadecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 335
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 336
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<223> alpha-aminoisobutyric acid

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<222> (32)
<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 336
His Xaa Glu Gly Thr Ph Thr Ser Asp Val S r Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Il Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 337
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (32)
<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 337
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 338
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 338
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 339
<211> 32

<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-(2-(4-hexadecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 339
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 340
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 340
His Xaa Glu Gly Thr Ph Thr S r Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 341
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> alpha-aminoisobutyric acid

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<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (32)
<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 341
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 342
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)
<223> alpha-aminoisobutyric acid

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<220>
<221> MOD_RES
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<223> N- psilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-t rminus

<400> 342
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Il Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 343
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
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<222> (32)
<223> N-epsilon-(2-(4-hexadecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 343
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 344
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 344
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 345
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (20)
<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 345
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 346
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<222> (20)
<223> N-epsilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequ nce has an amidat d c-terminus

<400> 346
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 347
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
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<220>
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<222> (20)
<223> N-epsilon-(2-(4-hexadecyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 347
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Xaa Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg
20 25 30

<210> 348
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (28)
<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 348
His Xaa Glu Gly Thr Ph Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 349
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<221> MOD_RES
<222> (29)
<223> alpha-aminoisobutyric acid

<220>
<223> this sequence has an amidated c-terminus

<400> 349
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 350
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutagen

<220>
<221> MOD_RES
<222> (2)
<223> alpha-aminoisobutyric acid

<220>
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<220>
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<220>
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<400> 350
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Ph Ile Ala Trp L u Val Xaa Xaa Arg
20 25 30

<210> 351
<211> 30
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<220>
<223> this sequence has an amidated c-terminus

<400> 351
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Xaa Xaa Arg
20 25 30

<210> 352
<211> 30
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<220>
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<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 352
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp L u Val Arg Xaa Xaa
20 25 30

<210> 353
<211> 30

<212> PRT
<213> Artificial Sequence

<220>
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<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 353
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1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 354
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<212> PRT
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<223> N-epsilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 354
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 355
<211> 30
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<220>
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<223> N-epsilon-(2-(4-hexadecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 355
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Xaa
20 25 30

<210> 356
<211> 32
<212> PRT
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<223> N-epsilon-(2-(4-decyl-1-piperazine)-acetyl)lysine

<220>
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<400> 356
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

<210> 357
<211> 32
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<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 357
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1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
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<210> 358
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<220>
<223> this sequence has an amidated c-terminus

<400> 358
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

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<220>
<223> this sequence has an amidated c-terminus

<400> 359
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1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Gly Xaa
20 25 30

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<400> 360
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1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

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<223> N-epsilon-(2-(4-dodecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 361
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1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30

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<223> N-epsilon-(2-(4-tetradecyl-1-piperazine)-acetyl)lysine

<220>
<223> this sequence has an amidated c-terminus

<400> 362
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Ph Ile Ala Trp L u Val Arg Xaa Arg Xaa Xaa
20 25 30

<210> 363
<211> 32
<212> PRT
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<220>
<223> this sequence has an amidated c-terminus

<400> 363
His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Arg Arg Glu Phe Ile Ala Trp Leu Val Arg Xaa Arg Xaa Xaa
20 25 30